



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/659,776

09/10/2003

Kristian Fagerstrom

944-003,174

4887

4955

7590

11/01/2006

WARE FRESSOLA VAN DER SLUYS &  
ADOLPHSON, LLP  
BRADFORD GREEN, BUILDING 5  
755 MAIN STREET, P O BOX 224  
MONROE, CT 06468

EXAMINER

SANTIAGO CORDERO, MARIVELISSE

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/659,776	Applicant(s) FAGERSTROM ET AL.	
	Examiner Marivelisse Santiago-Cordero	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-14 is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/18/06 has been entered.

### *Response to Arguments*

2. Applicant's arguments filed on 5/12/06, regarding claim 1, have been fully considered but they are not persuasive.

Regarding claim 1, Applicant argues that Lahr discloses at least one functional element mounted for reciprocal movement **with** the base element instead of **on** the base element (see Remarks: page 13, last paragraph). In response, the claim does not particularly and uniquely defines the term "on" as to distinguish it from the applied prior art. The term "on" is used, e.g., to indicate position above and supported by or in contact with or extent over (a surface) regardless of position. The claims are given their broadest reasonable interpretation. See MPEP 2111. Accordingly, Lahr meets each and every limitation of claim 1.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (see Remarks: page 14, 2<sup>nd</sup> full paragraph), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include

Art Unit: 2617

knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claim 31, the term “about” is a relative term, which renders the claim indefinite. The term “about” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention. An angle of about 90 degrees has been rendered indefinite by the use of the term “about”.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 17-18, 22, and 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Lahr (Pub. No.: US 2003/0132863).

Regarding claim 1, Lahr discloses a mobile communication device comprising:

(a) a base element (Figs. 2, 4-7, reference numeral 20);

(b) at least one functional element (Figs. 4-7, note the keyboard) mounted for reciprocal movement on said base element between retracted (Fig. 2) and extended positions (Fig. 7); and

(c) a cover element (Figs. 1-2, reference 12) having upper (Figs. 1) and lower faces (Fig. 3), said cover element mounted to said base element for relative movement thereto between closed and opened positions (Figs. 1-2, and 7) and adapted to move said at least one functional element between the retracted and extended positions during relative movement of said cover element between the closed and opened positions (Figs. 1-3, and 7).

Regarding claim 2, Lahr discloses a mobile communication device in accordance with claim 1, wherein said at least one functional element is configured to be exposed for operative use in the opened and extended positions (Fig. 7) and said cover element and said at least one functional element are configured to be in overlapping alignment in the closed and retracted positions (Figs. 1-2).

Regarding claim 3, Lahr discloses a mobile communication device in accordance with claim 1, wherein said cover element is a swivelable cover element rotatably mounted on said base element (Fig. 3; page 1, paragraph [0012]).

Regarding claim 4, Lahr discloses a mobile communication device in accordance with claim 3, wherein said swivelable cover element is rotatably mounted on said base element around an axis extending generally perpendicular to said upper and lower faces thereof (Figs. 1, 3, 5, and 7).

Regarding claim 5, Lahr discloses a mobile communication device in accordance with claim 3, wherein said swivelable cover element is rotatably mounted on said base element

Art Unit: 2617

around an axis extending generally perpendicular to the reciprocal movement of said at least one functional element (Figs. 1, 3, 5, and 7).

Regarding claim 6, Lahr discloses mobile communication device in accordance with claim 5, wherein said cover element is configured to rotate 90 degrees between the closed and opened positions (Figs. 5-6).

Regarding claim 7, Lahr discloses mobile communication device in accordance with claim 1, wherein said cover element is configured to rotate 90 degrees between the closed and opened positions (Figs. 5-6).

Regarding claim 17, Lahr discloses a mobile communication device in accordance with claim 1, further including a screen constructed in the upper face of said cover element to provide a visible display of information to the user (Fig. 1, reference numeral 14).

Regarding claim 18, Lahr discloses a mobile communication device in accordance with claim 1, wherein said at least one functional element is a function keyboard (Fig. 4; page 1, paragraph [0002]).

Regarding claim 22, Lahr discloses a mobile communication device in accordance with claim 18, wherein said function keyboard is exposed for operative use in the opened and extended positions (Fig. 7) and said cover element and said function keyboard are in overlapping alignment in the closed and retracted positions (Figs. 1-2).

Regarding claim 24, Lahr discloses a mobile communication device in accordance with claim 18, wherein said function keyboard has an array of keys consistent with selected functions (Fig. 2; page 2, paragraph [0025]), said array of keys are offset to prevent interference between said array of keys and said cover element in the closed and retracted positions (Fig. 2).

Art Unit: 2617

Regarding claim 25, Lahr discloses a mobile communication device in accordance with claim 1, further comprising a communication keypad constructed on said upper face of said cover element (Fig. 1, reference numeral 16), said keypad being exposed for operative use in the closed and opened positions (Fig. 1).

6. Claims 1-10, 15-17, 26-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Romeu et al. (hereinafter "Romeu"; Pub. No. 2004/0203526).

Regarding claim 1, Romeu discloses a mobile communication device comprising:

(a) a base element (Figs. 1-7, either of reference numerals 101 or 102; Figs. 10-11, either of reference numerals 901 or reference 902);

(b) at least one functional element (Figs. 1-7, reference numeral 103 and 111 either alone or in combination; Figs. 10-11, reference 903) mounted for reciprocal movement on said base element (Figs. 1-7 and 10-11) between retracted (Figs. 1, 7 and 10) and extended positions (Figs. 2, 4, and 11); and

(c) a cover element (Figs. 1-7, either of reference numerals 101 or 102, not being the base element; Figs. 10-11, either of reference numerals 901 or 902, not being the base element) having upper (Figs. 1-2; note either of the sides) and lower faces (Figs. 1-2, note either of the sides), said cover element mounted to said base element (Figs. 1-7 and 10-11) for relative movement thereto (Figs. 3-4 and 11) between closed (Figs. 1 and 10) and opened positions (Figs. 2 and 11) and adapted to move said at least one functional element between the retracted and extended positions during relative movement of said cover element between the closed and opened positions (Abstract; Figs. 1-7 and 9-10).

Regarding claim 2, Romeu discloses a mobile communication device in accordance with claim 1, wherein said at least one functional element is configured to be exposed for operative use in the opened and extended positions (paragraph [0024]) and said cover element and said at least one functional element are configured to be in overlapping alignment in the closed and retracted positions (Fig. 1).

Regarding claim 3, Romeu discloses a mobile communication device in accordance with claim 1, wherein said cover element is a swivelable cover element rotatably mounted on said base element (Figs. 1-2 and 10-11; paragraph [0025]).

Regarding claim 4, Romeu discloses a mobile communication device in accordance with claim 3, wherein said swivelable cover element is rotatably mounted on said base element around an axis extending generally perpendicular to said upper and lower faces thereof (Figs. 1-7 and 10-11).

Regarding claim 5, Romeu discloses a mobile communication device in accordance with claim 3, wherein said swivelable cover element is rotatably mounted on said base element around an axis extending generally perpendicular to the reciprocal movement of said at least one functional element (Figs. 1-7 and 10-11).

Regarding claim 6, Romeu discloses mobile communication device in accordance with claim 5, wherein said cover element is configured to rotate 90 degrees between the closed and opened positions (Figs. 1-2 and 10-11).

Regarding claim 7, Romeu discloses mobile communication device in accordance with claim 1, wherein said cover element is configured to rotate 90 degrees between the closed and opened positions (Figs. 1-2 and 10-11).



Regarding claim 8, Romeu discloses a mobile communication device in accordance with claim 1, wherein one of said cover element and said at least one functional element defines at least one eccentric groove (paragraphs [0025] and [0031]) and the other of said cover element and said at least one functional element has at least one pin captured in the eccentric groove (paragraph [0031]), whereby mechanical interaction of said at least one pin within said at least one groove during relative movement of said cover element to said base element between the closed and opened positions moves said at least one functional element relative to said base element between the retracted and extended positions (paragraph [0031]).

Regarding claim 9, Romeu discloses a mobile communication device in accordance with claim 8, wherein said at least one groove is defined in said cover element (paragraph [0031]) and said at least one pin is located on said at least one functional element (paragraph [0031]).

Regarding claim 10, Romeu discloses a mobile communication device in accordance with claim 1, wherein said at least one functional element is slidably received in at least one channel in said base element for reciprocal movement (Figs. 1-2 and 10-11), whereby said cover element and said at least one functional element mechanically interact during relative movement of said cover element to said base element between the closed and opened positions to move said at least one functional element relative to said base element between the retracted and extended positions (Figs. 1-3 and 10-11).

Regarding claim 15, Romeu discloses a mobile communication device in accordance with claim 10, wherein said at least one functional element has at least one tension spring element to bias said at least one functional element against said cover element as said at least one functional element is moved relative to said base element between the retracted and extended positions

Art Unit: 2617

during relative movement of said cover element to said base element between the closed and opened positions (paragraphs [0026], [0028]-[0029], [0035] and [0037]).

Regarding claim 16, Romeu discloses a mobile communication device in accordance with claim 1, wherein said at least one functional element has at least one tension spring element to bias said at least one functional element against said cover element as said at least one functional element is moved relative to said base element between the retracted and extended positions during relative movement of said cover element to said base element between the closed and opened positions (paragraphs [0026], [0028]-[0029], [0035] and [0037]).

Regarding claim 17, Romeu discloses a mobile communication device in accordance with claim 1, further including a screen constructed in the upper face of said cover element to provide a visible display of information to the user (Fig. 2, reference 205; note that in this case the cover element is 101).

Regarding claim 26, Romeu discloses a mobile communication device in accordance with claim 1, wherein said cover element and said at least one functional element are interactively connected for moving said at least one functional element relative to said base element between the retracted and extended positions during relative movement of said cover element to said base element between the closed and opened positions (Figs. 1-11).

Regarding claim 27, Romeu discloses a mobile communication device in accordance with claim 26, wherein said at least one functional element is slidable received in at least one channel in said base element for relative reciprocal movement therebetween (Figs. 1-2).

Regarding claim 28, Romeu discloses a mobile communication device in accordance with claim 26, wherein said cover element and said at least one functional element are interactively

Art Unit: 2617

connected by interaction of at least one eccentric groove with a pin follower therein for moving said at least one functional element relative to said base element between the retracted and extended positions during relative movement of said cover element to said base element between the closed and opened positions (Figs. 1-11; paragraphs [0025] and [0031]).

Regarding claim 29, Romeu discloses a mobile communication device in accordance with claim 26, wherein said cover element and said at least one functional element are interactively connected so that a portion of said cover element engages said at least one functional element during relative movement of said cover element to said base element between the closed and opened positions to move said at least one functional element relative to said base element between the retracted and extended positions (Abstract; Figs. 1-11).

Regarding claim 30, Romeu discloses a mobile communication device in accordance with claim 1, wherein said at least one functional element is mounted for reciprocal movement relative to said base element between the retracted and extended positions (Figs. 1-3 and 9-11; Abstract) and said cover element is mechanically connected to said at least one functional element to interact with said at least one functional element to move said at least one functional element relative to said base element between the retracted and extended positions during relative movement of said cover element between the closed and open positions (Figs. 1-3 and 9-11; Abstract).

Regarding claim 31, Romeu discloses a mobile communication device in accordance with claim 30, wherein said cover element is configured to rotate through an angle of about 90 degrees between the closed and open positions (Figs. 1-4; and 9-11).

***Claim Rejections - 35 USC § 103***

Art Unit: 2617

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 19-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahr in view of Kwon (Pub. No.: US 2004/0203513).

Regarding claim 19, Lahr discloses a mobile communication device in accordance with claim 18 (see above). Lahr fails to disclose wherein said function keyboard is constructed in two portions, each mounted for reciprocal movement on said base element between retracted and extended positions, each of said function keyboard portions having an array of keys consistent with a selected function.

However, in the same field of endeavor, Kwon discloses wherein said function keyboard is constructed in two portions (Fig. 3, reference numerals 8 and 9), each mounted for reciprocal movement on said base element between retracted (Fig. 2) and extended positions (Fig. 4), each of said function keyboard portions having an array of keys consistent with a selected function (Fig. 3, reference numerals 10 and 11).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to construct the keyboard of Lahr in two portions, each mounted for reciprocal movement on said base element between retracted and extended positions, each of said function keyboard portions having an array of keys consistent with a selected function as suggested by Kwon.

One of ordinary skill in this art would have been motivated to construct the keyboard in two portions, each mounted for reciprocal movement on said base element between retracted and extended positions, each of said function keyboard portions having an array of keys consistent with a selected function because it would carry out information input and transmission/receive of various data without selecting several character, numbers and the like by a single input key (Kwon: page 9, paragraph [0098]); in addition to reduce the volume of the device when not in use to facilitate convenient carry and storage.

Regarding claim 20, in the obvious combination, Kwon discloses wherein said two portions of said function keyboard move away from each other during movement from the retracted position to the extended position (Figs. 2-3) and toward each other during movement from the extended position to the retracted position (Figs. 5A-C).

Regarding claim 21, in the obvious combination, Kwon discloses wherein said two portions are on opposite sides of said cover element in the opened and extended positions (Fig. 4).

Regarding claim 23, in the obvious combination, Lahr discloses wherein said function keyboard comprises a full function QWERTY key array (page 2, paragraph [0025]). Moreover, in the obvious combination, Kwon discloses wherein said function keyboard comprises a full

Art Unit: 2617

function QWERTY key array split between the two portions (page 3, paragraph [0047]; note that QWERTY keyboard is a standard computer keyboard).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Romeu in view of Lee et al. (Patent No.: US 6,785,562).

Regarding claim 25, Romeu discloses a mobile communication device in accordance with claim 1, further comprising a communication keypad constructed on said upper face of said cover element (Fig. 2, reference 207; note that the cover element is represented by 102), but fail to specifically disclose said keypad being exposed for operative use in the closed position.

However, Lee discloses a keypad being exposed for operative use in the closed position (Fig. 3A, reference 60a; col. 6, lines 31-33).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to expose the keypad of Romeu for operative use in the closed position as suggested by Lee for the advantages of performing communications even in a closed state (Lee: col. 6, lines 1-3); thus, increasing convenience to the user.

#### *Allowable Subject Matter*

9. Claims 11-14 are allowed.

#### *Conclusion*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSC

MSC



LESTER G. KINCAID  
SUPERVISORY PRIMARY EXAMINER